

**Abstract**

The present invention provides a device for providing communications through power lines comprised of multiple conductors by transmitting the data signals through a plurality of the conductors. One embodiment of the present invention may be comprised of a transmit circuit communicatively coupled to a first energized conductor for applying a first voltage signal representing the data to the first energized conductor; the transmit circuit being communicatively coupled to a second energized conductor for applying a second voltage signal representing the data to the second energized conductor; and wherein the second voltage signal is opposite in polarity to said first voltage signal.